GOVERNMENT OF INDIA
NON-CONVENTIONAL ENERGY SOURCES
LOK SABHA

UNSTARRED QUESTION NO:637
ANSWERED ON:21.11.2002
SOLAR WATER HEATER IN MAHARASHTRA
DR. KIRIT SOMAIYA

Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) whether the scheme of the Government regarding solar water heater has received good response in Maharashtra;

(b) the number of solar water heater have been installed in Maharashtra during each of the last three years;

(c) the manner in which the Government motivated and help the users; and

(d) the details of the benefits and the steps taken to increase the use?

Answer

MINISTER OF STATE FOR NON-CONVENTIONAL ENERGY SOURCES (SHRI M. KANNAPPAN)

(a): Yes, Sir. The soft loan scheme for financing solar water heaters being implemented through the Indian Renewable Energy Development Agency (IREDA) and some banks has received good response in Maharashtra.

(b): Solar water heating systems employ devices known as solar collectors, which absorb solar radiation and transfer the heat to the water flowing through the collectors. A typical collector has an area of 2 sq.m. The number of collectors used in a system depends on the quantity of hot water required per day. Most domestic systems employ one or two collectors, while systems used in commercial and industrial establishments may employ 50-100 collectors or more. The total solar thermal collector area and the equivalent number of water heaters (using an average of 4 sq.m. per system) installed in Maharashtra during the last three years are estimated as follows:

Year	Total Solar Collector Area (Sq.m.)	Equivalent number of solar water heaters
1999-2000	8000	2000
2000-2001	13000	3250
2001-2002	14000	3500

(c): Solar water heaters were first promoted by the government through a demonstration scheme and later on by providing direct subsidy to the users for about a decade. Since the technology became technically and commercially viable, the capital subsidy was discontinued and replaced by interest subsidy provided by government. Currently loans at reduced interest rates are being provided to users through seven designated banks and IREDA. To motivate and help the users, advertisements are issued and business meets / training programmes / exhibitions are often organized. Also to ensure deployment of reliable products, national standards for solar collectors have been formulated and use of Bureau of Indian Standards (BIS) certified products has been made mandatory for any project receiving government assistance.

(d): It has been estimated that round the year use of a 100 litre capacity solar water heater can save around 1500 units of electricity and prevent emission of 1.5 tonnes of carbon dioxide per year. Installation of such 1000 solar water heaters can also contribute to a peak load reduction of 1 MW.

To increase the use of solar water heaters in the country, the following steps have been taken:

(i) A model amendment in building bye-laws making solar assisted water heating systems mandatory in certain categories of buildings has been formulated and the state governments / local bodies have been requested to incorporate the same in their building

bye-laws. Provision has been made for financial assistance to the municipalities / municipal corporations / local bodies which incorporate the above modification in their building bye- laws to support training and awareness promotion activities.

(ii) The bank scheme has been expanded to cover wider areas of the country to bring the benefits of the soft loans to more users.

(iii) A few State Electricity Boards (SEBs) have announced rebates in electricity tariff for homes which have installed solar water heaters. Other SEBs have been requested to do the same.

(iv) A special demonstration programme on cost sharing basis is being implemented in the North-Eastern states, Jammu & Kashmir and the Islands.